



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,715	12/05/2003	Noriyoshi Sakabe	117974	6908

25944 7590 01/25/2006

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

GAGLIARDI, ALBERT J

ART UNIT	PAPER NUMBER
----------	--------------

2884

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/727,715	Applicant(s) SAKABE, NORIYOSHI	
	Examiner Albert J. Gagliardi	Art Unit 2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/04, 12/03</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Comment on Submissions***

1. This office action is responsive to submissions filed on 5 December 2003.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a) and 1.84(o). The blocks in Figure 4 are required to be labeled with descriptive legends.
3. Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claim 6 is objected to because of the following informalities:

Regarding claim 6, the language of claim 6 is confusing; the examiner suggests wording such as "... the storing means may be disposed in at least one of the spaces between said recording means and said reading means and between said recording means and said deleting means" might be clearer.

5. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

Art Unit: 2884

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Miyagawa *et al.* (US 5,081,355).

Regarding claim 1, *Miyagawa* discloses (Fig. 1) an image data collecting device for analysis of material structure, comprising: a flexible belt (25) which is formed in ring shape and conveyed in the long direction thereof, an accumulated fluorescent sheet (stimulable phosphor) which is formed in ring shape commensurate with the configuration of said flexible belt and mounted on said flexible belt and where a radiant image data from a material to be analyzed is recorded (col. 9, lines 35-41); a recording means (30) to record said radiant image data into said accumulated fluorescent sheet by irradiating a given radiant ray onto said material; a reading means (50) to read out said radiant image data by irradiating excitation light (51); and a deleting means (60) to remove radiant energy remaining in said accumulated fluorescent sheet after reading operation by said reading means and before subsequent recording operation by said recording means.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa *et al.* (US 5,081,355).

Regarding claim 2, *Miyagawa* discloses that the area (25a or 25b) subjected to the radiant ray (30) is equal to the readable area (25a or 25b). Although, *Miyagawa* does not specifically identify the area exposed as the maximum area that can be readout, those skilled in the art appreciate that it is well known in the art that overexposure of radiation can be harmful to both the imaged object and the imaging equipment, and that it is common in the art to minimize overexposure when possible. Therefore absent some degree of criticality, it would have been obvious to a person of ordinary skill in the art to set the maximum exposed area to that which can be readout so as to minimize unnecessary exposure.

10. Claims 3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Miyagawa* as applied to above, and further in view of *Tamura et al.* (US 4,851,679).

Regarding the inclusion of plural reading means, although not disclosed by *Miyagawa*, those skilled in the art appreciate that various readout and processing steps (i.e., preliminary readout and subtraction processing) are well known in the art. *Tamura* discloses functionally equivalent arrangements wherein an image collecting device may include either one, or two reading sections (compare Figs. 1 and 5). As such, it would have been obvious to a person of ordinary skill in the art to modify the system suggested by *Miyagawa* so as to include a second reading means as suggested by *Miyagawa* in order to allow for faster processing.

Regarding claim 5, *Takahashi* discloses a storing means to allow for storage of fluorescent sheets wherein the storing means is composed of bended portions of the belt and said accumulated fluorescent sheet (see for example Fig. 2-130 and Fig. 4-340). Those skilled in the

Art Unit: 2884

art appreciate that use of the storing means allows for a greater area of (i.e., longer) fluorescent sheet to be arranged in a smaller, more compact collection device. Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system suggested by *Miyagawa* so as to include storing means composed of bended portions to allow for a higher capacity collecting device in a small space.

Regarding claim 6, *Takahashi* further discloses that the storing means may be disposed in at least one of the spaces between said recording means and said reading means and between said recording means and said deleting means (col. 12, lines 47-53).

11. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Miyagawa* and *Tamura* as applied above and further in view of *Takahashi et al.* (US 4,710,6269).

Regarding claim 4, although not suggested by *Miyagawa* in view of *Tamura*, those skilled in the art appreciate that a variety of functionally equivalent arrangements for arranging a reading section are known in the art. *Takahashi*, for example, discloses a variety of functionally equivalent arrangements (compare Figs. 2, 6 and 9) wherein the reading sections and other sections may be arranged in a linear, rectangular or cylindrical shape. Therefore, absent some degree of criticality, it would have been obvious to a person of ordinary skill in the art to modify the image collecting device suggested by *Miyagawa* in view of *Tamura* so as to arrange the reading sections in a cylindrical as suggested by *Tamura*, in view of the known functionally equivalence thereof.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2884

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert J. Gagliardi whose telephone number is (571) 272-2436. The examiner can normally be reached on Monday thru Friday from 10 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Albert J. Gagliardi  
Primary Examiner  
Art Unit 2884

AJG